

# nih record



ABOVE • NIGMS writer Alisa Zapp Machalek took this photo featuring interesting geometric elements offered by Bldg. 45.

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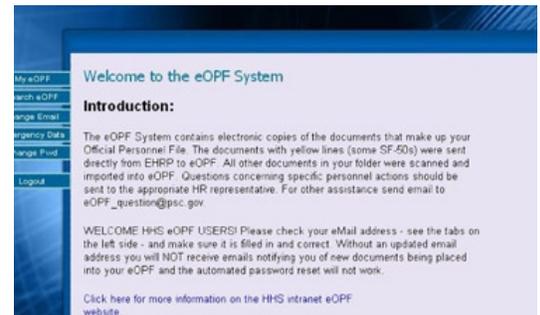
### Personnel Goes Paperless

## NIH Among First to Use New Electronic Folder System

By Carla Garnett

It won't affect your pay, leave or benefits. In fact, you may not even notice when it happens. Nevertheless, the folks in human resources are working hard to prepare you for receiving less—less paper, that is. Beginning in early August, all official personnel folders for HHS employees will be converted to electronic web-based files called eOPFs, electronic official personnel folders.

Say goodbye to the hard copies of such standard forms as the SF-50 Notification of Personnel Action. Instead, you will receive an email alerting you that a document has been added to your eOPF. You can then log into your eOPF account and view what has happened since your last visit. Similar to online timekeeping (ITAS) and Internet-based payroll (DFAS), the eOPF system gives



This screen will welcome NIH'ers to the new web-based electronic official personnel folder system.

SEE PERSONNEL FOLDERS, PAGE 6



Pedestrian turnstiles near Metro for NIH employees

### Perimeter Fence To Become Operational On Aug. 29

The NIH Perimeter Security System (PSS)—to most of us, the fence surrounding the NIH campus—will be operational on Monday, Aug. 29. The fence is the most obvious element of the PSS and balances the necessary level of security with as much convenience as possible for NIH employees, patients and visitors.

The most obvious change is that most security screening will take place at the perimeter. Visitors will be screened and visitor passes will be issued at designated visitor entrances at the

SEE PERIMETER FENCE, PAGE 4

### 17-Year-Old Enlightens NIH Scientists on Protein Structure Prediction, Teenagers

By Emily Carlson

If they hadn't been told beforehand, the crowd of scientists who attended a recent event hosted by NIGMS never would have known that their speaker was barely out of high school. With all the poise and confidence of the seasoned investigators who usually address such groups, 17-year-old Ryan Harrison wowed his audience with his scientific knowledge and unrelenting curiosity.

"I wouldn't have missed this for the world," said Dr. Roland Owens, a molecular biologist at NIDDK and a 1976 alumnus of the same high school as the young scientist.

Harrison caught the eye of NIGMS in January, when news spread that this Baltimore Polytechnic Institute high school senior had made it to the final round of the annual Intel Science Talent Search—the mother of all science fairs. The research he had submitted offered a new, more reliable way of predicting the three-dimensional shapes of proteins, an area of basic biomedical science strongly supported by the institute.

SEE TEEN SCIENCE TALENT, PAGE 8



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## briefs

### Check Benefits Reminders via Email

Health benefits, life insurance and the Thrift Savings Program. These are some of the benefits you may participate in as a federal employee. Each month, the Benefits and Payroll Liaison Branch of the Workforce Relations Division in the Office of Human Resources circulates, via the NIH Listserv, an email to the NIH staff. This email—titled “NIH Benefits Information - Did You Know?”—addresses issues that may affect your benefits. This email is the most efficient way to alert the NIH workforce about changes or events regarding the various benefit programs. So keep a look out for it. More information can be found at <http://hr.od.nih.gov/Benefits/default.htm>.

### OD Awards Ceremony Set, Aug. 18

The 2005 OD Merit Honor Awards Ceremony will be held on Thursday, Aug. 18 at 1:30 p.m. in Natcher Auditorium. All are welcome to attend.

### Free Outdoor Film Festival, Aug. 12-21

The 9th annual Comcast Outdoor Film Festival, a slew of free movies shown under the stars, is scheduled for 10 consecutive nights, Aug. 12-21. The R&W-sponsored event benefits the NIH children’s charities, including Special Love/Camp Fantastic, the Children’s Inn and Friends of the Clinical Center. The festival includes food, movies and fun on the grounds of Strathmore Hall (by the Grosvenor Metro station). The following movies will be playing:

Friday, Aug. 12, *Shrek 2*  
Saturday, Aug. 13, *Harry Potter and the Prisoner of Azkaban*  
Sunday, Aug. 14, *West Side Story*  
Monday, Aug. 15, *Million Dollar Baby*  
Tuesday, Aug. 16, *Grease*  
Wednesday, Aug. 17, *The Birds*  
Thursday, Aug. 18, *Raiders of the Lost Ark*  
Friday, Aug. 19, *Ray*  
Saturday, Aug. 20, *Spiderman 2*  
Sunday, Aug. 21, *Shark Tale*

For more information call R&W at (301) 496-6061.

### Yoga Meditation Held Monthly

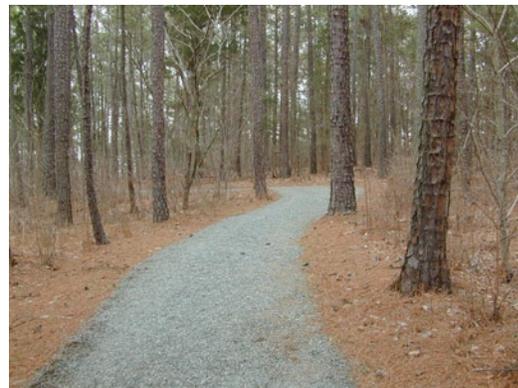
Sahaja yoga meditation class is held every Thursday at 7 p.m. on the third floor of the CRC, Rm. 3-1608. Sahaja yoga seeks to awaken inner energy called kundalini, and is offered for free and without obligation. The class is sponsored by the recreation therapy section of the rehabilitation medicine department. For more information contact Jasmin Salloum, (301) 402-5630.

### Fund for Susan Torres’ Family

If anyone is interested in contributing to Susan Torres and her child’s medical expenses, a fund has been established. Visit <http://www.susantorresfund.org/> to learn about her plight and to get updates on her family’s situation. Torres is an NIAID vaccine researcher who collapsed on May 7 and has been declared brain-dead, yet is bearing a child who is still developing in the womb.

### NIEHS Campus Merges Wildlife, Industry

NIEHS is the first workplace in surrounding Research Triangle Park, N.C., to achieve certification as a Wildlife and Industry Together, or WAIT, site. The WAIT program, managed by the North Carolina Wildlife Federation, is designed to recognize North Carolina workplaces that are practicing and promoting wildlife stewardship. It encourages the establishment of large portions of property for wildlife, but also addresses the need for environmental education for employees and the local community. Some of the NIEHS amenities highlighted during the certification process include a man-made lake (below) that is home to several fish species including largemouth and striped bass, bluegills, channel catfish and triploid carp, and a self-guided Nature Trail (bottom) that opened in February, serving both NIEHS and EPA employees. The campus also has a bluebird house program that’s been in place for nearly 30 years. It provides about 50 houses, which are cleaned several times a year. Data is collected and compiled on the numbers and types of birds found in them. The wooded 82-acre campus features pines and hardwoods, along with beaver, rabbits, deer, herons, egrets and ducks.



## Genetic Variation Alters Response to Warfarin

By looking at the genetic makeup of people taking warfarin, researchers show that variations in a gene involved in blood clotting may explain why certain people require a lower or higher dose of the commonly prescribed anti-clotting drug. The finding ultimately could help doctors determine each patient's warfarin dose more quickly and precisely.

The proper dose of warfarin (Coumadin) can vary greatly between people and be hard for doctors to predict. To understand what accounts for some of this variability, researchers from the University of Washington in Seattle and Washington University in St. Louis analyzed the genetic makeup of people taking warfarin. They looked for variations in the gene vitamin K epoxide reductase (VKORC1), which makes a protein that helps control clotting and is the key target of warfarin.

The researchers found that the gene accounted for 25 percent of the overall variation in warfarin dose, suggesting that information about the gene could predict a person's response to the anti-clotting drug. Although genetic screening for the gene could lead to more precise dosing, the researchers agreed more research needs to be done first.

"This research points to the value of pharmacogenetics, the study of how genetic variations can alter people's responses to medicines," said NIH director Dr. Elias Zerhouni. "It shows one important way in which we are beginning to apply knowledge about the human genome for treating disease and improving human health."

The study, part of the NIH Pharmacogenetics Research Network, was supported by NIGMS, NHLBI and NIEHS.

## NEI Launches Cogan Ophthalmic Pathology Collection

The National Eye Institute recently announced a new online resource for pathologists, ophthalmologists, optometrists and students. The David G. Cogan Ophthalmic Pathology Collection, a study and teaching collection of clinical ophthalmic cases and their pathology, is now available worldwide from the NEI web site at [www.nei.nih.gov](http://www.nei.nih.gov).

The collection contains 1,040 cases and 3,000 slides culled from the more than 6,000 cases from Cogan's clinical practice. Cogan, a distinguished ophthalmologist and researcher, was professor and chairman of the department of ophthalmology at Harvard Medical School and senior scientist emeritus at NEI.

Dr. Carl Kupfer, founding director of NEI, worked for several years converting Cogan's lifetime collection of slides and clinical descriptions into an easily navigable clinical archive. The announcement and availability of the Cogan Collection took place on June 13 at the Lawton Chiles International House (Stone House). The agenda included introductory remarks by Dr. Paul Sieving, NEI director, a presentation by Kupfer of representative case studies from the web site and comments by invited guests.



PHOTOS: ERNIE BRANSON



**Top:** Dr. Paul Sieving (l), NEI director, and Dr. Carl Kupfer, founding director of NEI, host the launch of the David G. Cogan Ophthalmic Pathology Collection held on June 13 at the Lawton Chiles International Center.

**Above:** Kupfer welcomes Cogan's daughters Dr. Priscilla Cogan (l) and Polly Cogan Parson (r). Kupfer was instrumental in bringing their father to NEI. Many warm memories and stories were shared during the day's events.

**Left:** Kupfer and Yuriko Kuwabara examine the Internet-accessible Cogan Collection of 3,000 slides from 1,040 clinical cases collected by Cogan during his career as a clinician and research ophthalmologist. Kuwabara is the daughter of Dr. Toichi Kuwabara, a long-time friend and scientific colleague of Cogan. The two made a formidable team in ocular clinical pathology.



**Top:**  
Temporary NIH Gateway Center at Metro for visitor screening and badging

**Below:**  
Exiting the pedestrian portal

## PERIMETER FENCE TO BECOME OPERATIONAL IN LATE AUGUST

CONTINUED FROM PAGE 1

perimeter rather than at the buildings. Most campus buildings will remain “open” during normal business hours; you will not have to use your badge to enter. Security staff will only be

posted at select locations to check for IDs and screen visitors. Moving most screening to the perimeter fosters an “open campus” environment.

Okay, but what does it mean to you?

### NIH Employees

**Vehicle Access:** There is no change to vehicle entrance hours. Employees can enter all vehicle

entrances during normal business hours and the NIH Gateway Center at Metro (Rt. 355 and South Drive) is open 24 hours a day, 7 days a week. See specific gate hours on campus maps listed at <http://security.nih.gov>.

During normal business hours, drivers will present their NIH ID badge to the card reader and wait for a green light signaling a valid card. Security staff will check that you have an NIH parking hanger, that all passengers have NIH or HHS-issued IDs and will verify that you get a green light to proceed. Passengers without an NIH or HHS-issued ID badge can enter campus

via the Gateway Center at Metro and receive an NIH Visitor ID badge after being screened.

After normal business hours, drivers will present their ID badge to the card reader. After receiving a green signal light, a gate arm (like the ones used at parking garages) will raise and they may proceed.

**Pedestrian and Bicyclist Access:** NIH ID badge holders can enter on foot or on bikes at all pedestrian portals 24 hours a day, 7 days a week. Badge holders can also enter through turnstiles located at vehicle entrances.

Entry at pedestrian portals is a two-step process allowing one person at a time to enter through the portal. Pedestrians present their badge to the card reader outside of the portal, receive a green signal and enter the portal. After the first door closes, present your card to the badge reader inside. A green light on the card reader signals that you may proceed into the campus.

To exit, present your badge to the card reader at the gate inside the campus and pull the gate open. Once inside, depress the button marked “Push to Exit” on top of the card reader pedestal and push the second gate open to exit the campus. To ensure safety, all pedestrian portals are equipped with emergency call boxes and video monitors linked to the NIH Emergency Communications Center.

### NIH Visitors

**Vehicle Access:** Visitors who drive can enter



the campus at the NIH Gateway Center at Metro where vehicle inspections, visitor screening and badge issuance will be done as part of the entrance process at the vehicle inspection station.

**Pedestrian Access:** Visitors can enter campus on foot at two locations. The NIH Gateway Center at Metro is available 24 hours a day, 7 days a week. The NIH West Visitor Entrance at Old Georgetown Rd. and South Dr. (adjacent to vehicle entrance) is available for entry and exit during normal operating hours—5 a.m. to 9 p.m. Visitor screening and visitor badges will be issued in the visitor centers.

### NIH Patients and Patient Visitors

**Vehicle and Pedestrian Access:** Patients and patient visitors can access the campus at two locations. The NIH Patient Entrance at Cedar Lane and West Dr. is open 7 a.m. – 3 p.m., Monday through Friday where screening and vehicle inspections will take place. Clinical Center Hospitality Staff will be on hand to assist. The NIH Gateway Center at Metro is open 24 hours a day, 7 days a week and is also available to patients and patient visitors as an entry point into the campus.

### Shuttles

Shuttles will continue to circulate on campus and transport riders to and from off-campus buildings. There will be some changes for visitors riding shuttles but little or no change for riders with NIH IDs.

**On-campus shuttles:** Employees can board on-campus shuttles at any shuttle stop within the

perimeter fence. Employees entering campus from Metro can board the on-campus shuttle after going through a pedestrian turnstile near the Metro. Visitors must first go to the Gateway Center at Metro to get an NIH visitor badge before boarding the shuttle.

**Off-campus shuttles:** Shuttles coming from off-campus locations will stop briefly near the vehicle inspection station at the Metro entrance for screening. A member of the security staff will board the bus to check for NIH or HHS-issued ID badges and the vehicle will be inspected. Those without a valid badge will get off the shuttle and proceed to the NIH Gateway Visitor Center for screening and to receive an NIH Visitor badge. The off-campus shuttle will proceed through the perimeter and continue on its normal campus route. Valid badge holders will not have to switch shuttles. After obtaining a visitor badge, visitors can proceed onto campus and catch a shuttle once inside the fence.

To learn more, check out the PSS Quick Reference Guide with campus map and the PSS Photo Gallery at <http://www.security.nih.gov>. Watch for future notices about NIH security in NIH publications, global emails and at the web site mentioned above.

Still have questions? Contact the ORS Information Line at [orsinfo@mail.nih.gov](mailto:orsinfo@mail.nih.gov) or (301) 594-6677, TTY (301) 435-1908. 📞



*NIH employee presents ID badge to card reader at vehicle entrance.*

### Remember To Validate Your NIH Badge

Everyone holding an NIH ID is reminded to stop by one of the self-service badge validation stations to confirm that your badge is functioning properly. It is important that employees and contractors wear their NIH ID badges at all times and make sure the badge has not expired and is working properly for easy access to the NIH campus.

If you currently use your badge for electronic access to a building, it is likely that it is functioning properly. Badge validation is quick and easy, so why not forego the guesswork? Stop by one of the badge validation stations at any of the 6 convenient locations on or off campus:

Bldg. 31A; Bldg. 45; Clinical Center (Old Admissions Desk); Twinbrook II (12441 Parklawn Dr.); 6130 Executive Blvd.; 6700 Rockledge Dr.

A red or flashing light on the card reader means your badge is not working properly and needs to be reissued. If so, contact your supervisor or administrative officer to begin the process for a new badge.



*Checking NIH ID at badge validation station*

## PERSONNEL FOLDERS GO PAPERLESS

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workers more immediate access to their employment information.

In a few weeks, each NIH'er will receive a letter from the HHS Program Support Center. It will provide your eOPF user identification and other specific information for using the system. The PSC will also be sending out emails titled "eOPF

password request" containing your initial password. At first, you will be able to use eOPF only at computers on the HHS network. Eventually access will expand to wherever the Internet is available.

In addition to round-the-clock, instant access to your federal employment history, eOPF offers several other benefits:

- **Better security.** Only authorized people may view your files. Since there is no hard copy, there is no paper to be mishandled, misfiled or transported through the mail. "This will cut down on the number of hands that touch your personnel documents," noted Robert Spector, an HHS information technology specialist who worked on the eOPF conversion team and presented an introduction to the system for NIH'ers on June 8. "There will be fewer opportunities for errors."

- **More convenient searching.** If you have been in federal service for a while, you know how much paperwork you can collect over the course of a career. Looking through your personnel folder for documents from just a few years ago often meant rummaging through dozens of pages of material. When eOPF goes live, you'll be able to type in a search term, hit "enter" and let the computer do the looking.

- **Easy backup and recovery.** Paper folders are more likely to be lost, stolen or destroyed in a fire or flood. Electronic files are safer and will be backed up every day.

- **Economical storage.** According to estimates, active HHS personnel folder documents accounted for more than 10 million pages, or about 190

trees. eOPF significantly reduces the costs of document storage, maintenance and retrieval.

"Nothing like this has been undertaken by the federal government before now," Spector said, noting that although HHS will be among the first to convert to digital files, all federal agencies will make the switch to eOPF by September 2008.

However, not all documents are eligible for electronic conversion. Paper copies are still required for so-called "wet ink signature" documents that include, for example, forms dealing with your health and life insurance. HHS will continue to maintain and store these files, as required by law.

The eOPF system was tested in a pilot last March. One thousand HHS employees were chosen at random to participate. Those workers have had access to their official personnel folders ever since.

"It's been a couple of months since I used the eOPF system, but I recall it being very user friendly," said pilot user Paula Cohen of the

### What's In Your OPF, and What's Not

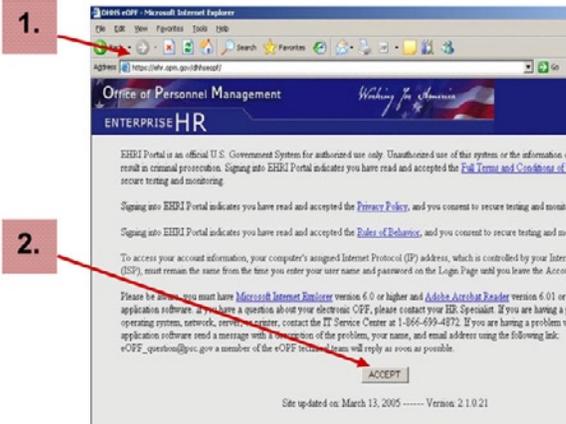
If you've never had an occasion to check out your official personnel folder, electronic OPF may offer just the opportunity. What should you expect to see? The paper OPF is divided into two sections: left side and right side—left for temporary documents; right for long-term documents that are kept for the life of the folder, usually 115 years from the employee's date of birth.

All documents are filed by date, with the most recent on top. Your eOPF will be similarly organized, so you can expect to see the resume or SF-171 that was used to hire you in your first federal job, health benefits registration forms as well as any documents signaling a change in coverage, life insurance forms, retirement coverage documents for Civil Service Retirement System (CSRS) or Federal Employees Retirement System (FERS) and Thrift Savings Plan (TSP) election forms and updates, and military service records.

Do not look for such documents as occupational medical records, training forms or award justifications. Over time, the U.S. Office of Personnel Management reevaluates and revises regulations about what records should and should not be kept regarding your federal employment.

Remember too, all OPFs—paper and electronic—are the property of OPM. The records are maintained to protect the rights of employees as well as Uncle Sam.

eOPF User Agreement Page



eOPF Logon Page



**Top:**  
Before logging onto eOPF, employees must first read and accept conditions on the user agreement page.

**Above:**  
At logon, users will be asked for their eOPF ID and password.

NIH Visitor Information Center. “During the 15 years that I have been an NIH employee, I have misplaced numerous paper copies of important personnel documents, so I found it very helpful and comforting to have all of my personnel documents online, organized and easily accessible. The only negative—yet another password to memorize.”

Cohen’s experience is probably fairly typical for viewing official personnel folders: Unless there’s a need to get access to it—to calculate retirement benefits, for a move to a job in another agency or to track a promotion, for example—most employees don’t go looking for their folder and may not even realize what documents it contains. That could change when the information is available at your fingertips.

“Right now some employees keep all their forms, some don’t keep any,” said Darla Allen, human resource information specialist and project lead of the eOPF conversion team at NIH. “Some documents can take a while to reach employees, because sending out SF-50s cannot always be the highest priority for some administrative officers and human resource specialists working on more critical issues. eOPF is going to allow employees immediate access, and it’s also going to allow HR staff to do more strategic planning.”

As for the password issue, apparently it’s a common user complaint agency wide, not only for eOPF but also for other IT applications. Spector explained that employees will be prompted every 90 days to set a new password, whether or not they log into eOPF. “You might find it’s a cumbersome process to login, but we are not compromising on security,” he concluded. The 90-day requirement to change passwords is part of an HHS policy.

More opportunities for employees to get familiar with eOPF are scheduled for Aug. 3 at NIEHS facilities in North Carolina, Aug. 16 on Executive Blvd. and Aug. 23 on the main campus. Watch your email for specific times and places. To get a head start before eOPF goes live, visit the web page at <http://hr.od.nih.gov/eOPF/default.htm>. 📍

### Three Scientists Join NIGMS

NIGMS recently welcomed three new additions to its scientific staff.

Dr. Susan Haynes, a program director in the Division of Genetics and Developmental Biology, is managing grants in the area of developmental genetics. She came to NIGMS from the Uniformed Services University of the Health Sciences, where she served as assistant professor in the department of biochemistry and molecular biology. Prior to that, she was a senior staff fellow in the Laboratory of Molecular Genetics at NICHD. Haynes earned a B.S. degree in biology from the University of Cincinnati and a Ph.D. in molecular cell biology from Rockefeller University.



Dr. Matthew Portnoy, a program director in the Division of Genetics and Developmental Biology, is responsible for grants related to DNA repair and mutagenesis as well as SBIR/STTR and post-doctoral fellowship grants. Before joining NIGMS, he was a post-doctoral fellow in the NHGRI Genome Technology Branch. He earned a B.S. degree in molecular and cell biology from Pennsylvania State University and a Ph.D. in biochemistry and molecular biology from Johns Hopkins University.



Dr. Meredith Temple-O’Connor, a scientific review administrator in the Office of Scientific Review, is handling a range of research and training grant applications, including those focused on increasing the number of minority biomedical and behavioral scientists. She was formerly acting director of the Division of Inter-Disciplinary Training at NIBIB. Earlier, she was a senior advisor for scientific programs at the institute’s Division of Extramural Activities. Temple-O’Connor began her NIH career as a program analyst in NINDS. She earned a B.S. degree in psychology and a Ph.D. in biological psychology from Virginia Commonwealth University. 📍



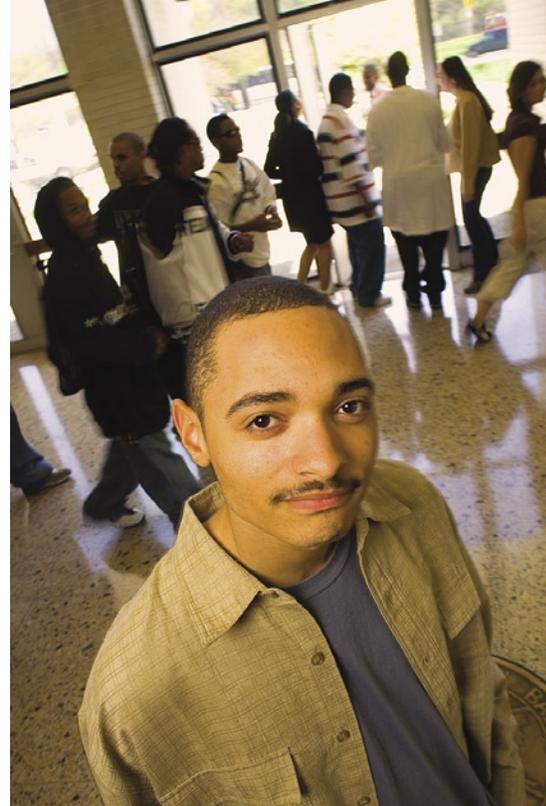
**Top:**  
Dr. Susan Haynes

**Middle:**  
Dr. Matthew Portnoy

**Bottom:**  
Dr. Meredith Temple-O’Connor

## TEEN SCIENCE TALENT

CONTINUED FROM PAGE 1



**Right:**

Ryan Harrison will continue his research as a freshman at Johns Hopkins, where he will participate in the university's Baltimore Scholars program. It offers full tuition scholarships to Baltimore City high school students.

After Harrison took home fifth place and a \$25,000 college scholarship, NIGMS director Dr. Jeremy Berg sent a personal note inviting him and his mentor, Dr. Jeffrey Gray of Johns Hopkins University, to discuss their work at NIH. "We thought it'd be a great opportunity for Ryan to get to know NIH and for us to learn about new research in protein structure prediction," said Berg.

Watching Harrison click through his slides and coolly answer questions from the audience, you'd assume he had been studying proteins his entire life. But neither a prodigy nor a stellar student, Harrison stands apart from many of his teenage peers not because he knows all the answers, but because he asks all the questions. "It's one of his special qualities," said Gray, an NIH grantee.

When Harrison started his research with his mentor 2 years ago, he had taken biology and physics classes, but not organic chemistry. "I knew what a protein was, but I had a lot more to learn," he said. Ironically, he relied on the Berg biochemistry textbook to master the science.

Armed with ideas and the discipline to learn—perhaps traits he picked up from his mother, a teacher, and his father, a former corrections officer—Harrison peeled through other college-level textbooks until he uncovered the problem he wanted to solve: How can you predict the shapes of proteins in an environment with particular acidity or alkalinity levels, factors that can drastically change the structures and functions of these molecules vital to many biological processes?

During his mentorship in the lab at Johns Hopkins, Harrison developed the computer code to make this possible. His methods will be integrated into the well-known protein structure prediction modeling program called Rosetta, currently being enhanced with NIGMS support. Harrison said he hopes the incorporation will shed new light on proteins and their functions, as well as lead to more effective medicines for treating diseases.

As Harrison wrapped up his talk, the scientists in the room drilled him with questions about his work. With one hand casually dangling from a pocket, he answered them all. Dr. James Cassatt, an NIGMS division director in cell biology and biophysics, said, "Someday, you'll submit a grant, and it'll come here. But we'll all be retired!"

While Harrison left NIH that day with an accurate, three-dimensional model of a protein he'd been working on—Berg himself had bent it from wire—the audience left with entirely new impressions of what a teenager can accomplish, raising the bar for their own children. One NIGMS staff member, who works with inner-city schools to promote scientific research and mentorship programs among underrepresented minorities, got first-hand tips on recruiting new mentors and students from Harrison, an African American educated by the Baltimore City public school system. For others, the recent high school graduate stimulated them scientifically. "This event really turned me on, more so than a lot of recent seminars," said Cassatt.

Harrison will continue his research with Gray as a freshman at Johns Hopkins, where he will participate in the university's Baltimore Scholars program that offers full tuition scholarships to Baltimore City high school students. But Harrison isn't entirely sure where his curiosity will take him. Perhaps he'll follow one of his other interests: poetry, history or philosophy. Berg said, "There's no doubt in my mind that he will go far no matter what he does. We should definitely keep our eye on him!"



## Protein Structures Take the Stage

With genomics getting so much media attention, researchers working on proteins could be excused for grumbling that it is proteins, after all, that actually do most of the work in the cell. Technology has enabled an accelerating stream of genome sequences, and powerful new methods like gene expression arrays have identified countless genes involved in virtually every disease and condition under the sun. The study of proteins has been advancing as well, albeit more quietly, and just passed a milestone as the Protein Structure Initiative (PSI, an NIGMS effort) completed its first 5-year phase and moved into its second.

The goal of the PSI is basically to make it easier to figure out the three-dimensional shapes of proteins, with the long-term goal of being able to predict most protein structures from their DNA sequences. A genetic mutation is, to use an analogy, like a spelling change in one letter of a long word. To understand how that mutation leads to disease, it helps to know how it changes a protein's structure. How proteins work, put simply, depends on their three-dimensional structure.

But it's more than a better understanding of biology that's at stake. For example, NIGMS-funded researchers at Yale recently identified the structural changes that enable bacteria to become resistant to some antibiotics. Researchers knew that a mutation in a ribosome gene led to the resistance, but by analyzing the structure, they now know exactly why the antibiotics don't bind as well. They are already using this information to try to design new antibiotics. These kinds of protein structure studies can guide the way in designing medicines to target defective proteins that cause all kinds of disease.

PSI's first phase was dedicated to figuring out how to process proteins and determine their three-dimensional structures more efficiently. Its focus was on developing innovative approaches and tools such as robotic instruments. Nine pilot centers created what is now a collection of more than 1,100 protein structures, which serve as templates for modeling related sequences. Software developed by the PSI can now compare a structure against three-

dimensional structural templates and identify functionally important motifs.

Phase 2 is the production phase, in which thousands more protein structures will be solved and put into the Protein Data Bank (<http://www.rcsb.org/pdb/>), a public repository with powerful tools for processing protein structure information. Some centers will also work to develop new methods—for instance, for solving the structure of membrane proteins.

For more information, including some provocative images, see <http://www.nigms.nih.gov/psi/>. —**Harrison Wein** 

### Stanfield Appointed DEA Director at NIDDK

*Dr. Brent Stanfield has joined the National Institute of Diabetes and Digestive and Kidney Diseases as director of the Division of Extramural Activities. He comes to NIDDK from the Center for Scientific Review, where he served as acting director from October 2003 to June 2005. Prior to that, he served as deputy director of CSR for 3 years, from July 2000 until October 2003. Stanfield's NIH experience includes time spent in the OD Office of Science Policy and over 13 years spent with the National Institute of Mental Health, where he ran the unit on developmental neuroanatomy in the Laboratory of Neurophysiology from 1987 to 1996.*



### Selmanoff Joins CSR

*Dr. Michael Selmanoff recently joined the Center for Scientific Review as a scientific review administrator in the integrative, functional and cognitive neuroscience integrated review group. He is overseeing the neuroendocrinology, neuroimmunology and behavior, and the biological rhythms and sleep study sections. After receiving his Ph.D. in neurobiology, he had postdoctoral training at the University of California, San Francisco, in its Reproductive Endocrinology Center. For the past 27 years, he has been a faculty member in the department of physiology at the University of Maryland School of Medicine. There, he conducted basic research in reproductive neuroendocrinology and taught medical and graduate students. His NIH-sponsored research investigated the neuroendocrine regulation of prolactin and luteinizing hormone secretion from the anterior pituitary gland. The work focused on the physiological regulation of hypothalamic dopamine neurons controlling prolactin secretion, and the peptidergic gonadotropin-releasing hormone neurons controlling luteinizing hormone secretion.*



### CIT Computer Classes

All courses are given without charge. For more information call (301) 594-6248 or consult the training program's home page at <http://training.cit.nih.gov>.

Mathematica Introduction	8/1-2
XML Basics	8/1-9/12
Sciware: Ready to Run Scientific Applications	8/2
Proteome BioKnowledge Library, TransFac, and TransPath Databases	8/2
Introduction to Cascading Style Sheets	8/3
Data Warehouse Query: Human Resources	8/3
SPSS Clementine Data Mining Introduction	8/3
Getting Started with the Mac on OS X	8/4
Effective Management of Telecommunications Requests	8/4
Data Warehouse Query: Property Management	8/4
Elements of Data Analysis	8/5
nVision Travel	8/8
AFNI Summer Bootcamp	8/8-12
Blackberry Tips and Tricks	8/9
Polish Your Images with Photoshop Elements	8/10
PubMed	8/11
EndNote (PC) Basics	8/11
Reference Manager 11 (PC) Basics	8/11

### FAES Announces Fall Courses

The FAES Graduate School at NIH announces the schedule of courses for the fall semester. The evening classes sponsored by the Foundation for Advanced Education in the Sciences will be given on the NIH campus.

Courses are offered in biochemistry, biology, biotechnology (daytime courses), chemistry, immunology, languages, medicine, microbiology, pharmacology, statistics, toxicology, alternative medicine and courses of general interest. It is often possible to transfer credits earned to other institutions for degree work, and many courses are approved for category 1 credit toward the AMA Physician's Recognition Award.

Classes will begin Sept. 12; mail registration ends Aug. 12 and walk-in registration will be held Aug. 29-Sept. 2. Tuition is \$115 per credit hour, and courses may be taken for credit or audit. Courses that qualify for institute support as training should be cleared with supervisors and administrative officers as soon as possible. Both the vendor's copy of the training form and the FAES registration form must be submitted at the time of registration. Note that FAES cannot access forms from the NIHTS system; a signed hard copy (vendors' copy of SF 182 form) is needed in order to process registrations for classes. Asking your institute to pay your tuition does not constitute registration with the FAES Graduate School.

Catalogs are available in the graduate school office in Bldg. 60, Suite 230; the foundation bookstore in Bldg. 10, Rm. B1L101; and the business office in Bldg. 10, Rm. B1C18. To have a catalog sent, call (301) 496-7976 or visit <http://www.faes.org>.



### Diversity Grand Rounds Lecture Set

The Office of Equal Opportunity and Diversity Management will present the next lecture in the Diversity Grand Rounds Series, "Cultural Competencies in a Research Environment," on Thursday, Aug.

4 from 10 to 11:30 a.m., Lipsett Amphitheater, Bldg. 10. The speaker will be Dr. Harry R. Gibbs, associate professor of medicine and cardiovascular disease and vice president for institutional diversity at the University of Texas M.D. Anderson Cancer Center, Houston. All are welcome.



### Kerr Wins Alumna Award

Dr. Mary Kerr (l), who recently joined NINR as deputy director, was presented the Frances Payne Bolton School of Nursing, Case Western Reserve University Distinguished Alumna award at a May 14 ceremony in Shaker Heights, Ohio. Dr. May L. Wykle, dean and

Florence Cellar professor of nursing, presented the award. Kerr received her Ph.D. from that institution in 1991. The award, which recognized her "outstanding scholarship, visionary leadership, and dedication to advancing nursing and health care through extensive research and creative educational programming" is the highest honor bestowed by the Alumni Association. During her career, Kerr has focused her research on preventing cerebral ischemia and maximizing cerebral perfusion in the critically ill patient with a neurological condition.

### NIDDK Program Wins Medal

The National Diabetes Education Program (NDEP) received the Charles H. Best Medal for Distinguished Service in the Cause of Diabetes from the American Diabetes Association on June 10 at the ADA's 65th annual meeting and scientific sessions in San Diego. The medal is named for Dr. Best, the co-discoverer of insulin. The award honors distinguished service in the field of diabetes, including both scientific and nonscientific endeavors.

The NDEP, founded in 1997, is an initiative that involves public and private partners to improve the treatment and outcomes of people with diabetes, to promote early diagnosis and to prevent the onset of diabetes. The initiative is co-sponsored by NIDDK and by the Centers for Disease Control and Prevention, with the participation of more than 200 partner organizations, including the ADA.



# volunteers

## Cancer Survivors, Controls Needed

A study needs volunteers who have been diagnosed and treated for brain or breast cancer, are between the ages of 20 and 70, and were working full time for at least one year prior to diagnosis. We also need healthy volunteers who have never been diagnosed with cancer and have no chronic illness, are between the ages of 20 and 70 and who have been working full time for at least the past year. You will be asked to complete a 1-hour questionnaire online with questions related to work and health. Participants will be compensated and receive a free Livestrong yellow wrist band. If interested, go to <http://cimo1.usuhs.mil/mps/jhansen/Inclusion.tp4> and enter any username and password you wish. Research is conducted by the Uniformed Services University of the Health Sciences and American University.

## Healthy Volunteers Needed

We are seeking healthy male and female volunteers ages 18-50 for a research study to determine whether herbal supplements (echinacea, ginkgo or ginseng) alter the metabolism of lopinavir/ritonavir (an anti-viral medication). In order to participate, you must be a non-smoker in good health, not be HIV-infected and not be taking any chronic medications. Participants will be compensated for their time and inconvenience. For more information, contact Jocelyn Voell, (301) 435-7913 or Liz Formentini, (301) 594-9905.

## Lyme Disease Study

Do you think you have Lyme disease? People with active Lyme disease are invited to participate in a study at NIH. Evaluation and treatment provided. For information call (301) 496-8412.

## Are You a Woman Who Has Been Depressed?

NIMH is looking for female volunteers to participate in a study that examines the role of hormones in depression. Participants should have experienced depression in the past but not be currently depressed, be between ages 18-45, be medically healthy and not be taking any medications, including birth control pills. Study includes thorough evaluations and compensation. For more information call Linda Simpson-St. Clair, (301) 496-9576 (TTY 1-866-411-1010).

## Stopping Your Estrogen Therapy?

NIMH is investigating whether mood, anxiety and irritability occur when you stop taking your estrogen or estrogen/progesterone combination therapy. Participants should be ages 45-60, be currently taking estrogen therapy or combination therapy and be in good physical health. For information call Linda Simpson-St. Clair, (301) 496-9576 (TTY 1-866-411-1010).



*Dr. Vivian Pinn (l), director, Office of Research on Women's Health, welcomes new members to the ORWH advisory committee. They include (from l) Drs. Carmen Zorilla, Luther Clark, Linda Kaste and PonJola Coney.*

## Five Join Advisory Committee on Women's Health Research

Five new members recently joined the advisory committee on research on women's health: Dr. Luther Clark, Dr. PonJola Coney, Dr. Andrea Dunaif, Dr. Linda Kaste and Dr. Carmen Zorilla.

Clark is chief of the division of cardiovascular medicine, professor of clinical medicine and director of the cardiology fellowship training program at the State University of New York Health Science Center (Downstate) in Brooklyn.

Coney is senior vice president for health affairs and dean of the School of Medicine at Meharry Medical College in Nashville.

Dunaif is chief of the division of endocrinology, metabolism, and molecular medicine at Northwestern University, Feinberg School of Medicine, in Chicago.

Kaste is an associate professor and director of predoctoral dental public health at the University of Illinois at Chicago College of Dentistry.

Zorilla is professor of obstetrics/gynecology, University Hospital, University of Puerto Rico.

## NHLBI's Hegyeli Retires After 36 Years

Dr. Ruth Johnsson Hegyeli recently retired after 36 years with NIH. She served as associate director for international programs, NHLBI for 33 of those years.

A native of Sweden, she earned her medical degree at Toronto University. While there, her studies in the survival of living cells in adverse environments led to an invitation to come to the United States to work as a research associate for Nobel laureate Prof. Albert Szent-Gyorgi, and to establish a tissue culture laboratory at his institute in Woods Hole, Mass. From there, Hegyeli went to Columbus, Ohio, where she was head of the Battelle Memorial Institute's cell biology laboratory and principal investigator on two NIH-funded studies. Her cell biology work on the interface of living cells with biomaterials still appears in medical texts and was key to the development of the artificial heart.

Hegyeli joined the National Heart Institute (now NHLBI) in 1969. In 1973, she was made director of the Office of International Programs.

She recently wrote about key NHLBI achievements in health, diplomacy, medicine and science. During her tenure, NHLBI established a 20-year collaboration between the U.S. and China for cardiovascular research and a 30-year program of cooperation with Russia and the former Soviet Union. NHLBI began its international programs in the area of hypertension, as illustrated by joint U.S.-Egypt creation and maintenance of the Egypt National Hypertension Program, which expanded into the Pan Arab Hypertension League.



International partners of NHLBI are now looking more broadly at cardiovascular disease. The historic U.S.-Pan American Health Organization meeting was held here in 2004. That conference brought together representatives from other institutes in addition to NHLBI as well as ministers of health from Canada and seven Latin American countries. The conference led to creation of working groups to establish the Pan American Cardiovascular Initiative to address the cardiovascular health needs of the Western Hemisphere.

"Ruth Hegyeli has helped the international community in more ways than I can hope to enumerate," said Dr. Elizabeth Nabel, NHLBI director. "Her compassion, perseverance, and unwavering belief in expanded cooperation in medicine and science inspired everyone in the institute."

Hegyeli has received more than 20 national and international awards in medicine and science. Most recently, she was awarded the International Peace Prize in 2004, the Fogarty Scholar gold medal in 2005 and the Surgeon General's Exemplary Service Award in 2005. She also has received at least 20 awards in literature, culture and poetry over the past two decades.

Hegyeli is looking forward to an active retirement. Her foremost longstanding commitment is to assist needy and handicapped children, especially HIV/AIDS orphans in Africa. A distinguished poet of the International Society of Poets (ISP) and an elected member of the World Literary Academy, Cambridge, England, she will present some of her poetry at the August 2005 ISP international convention in Washington, D.C. 📍

**Top:** Surgeon General Richard Carmona surprised Dr. Ruth Hegyeli at her retirement luncheon. He thanked her for her years of service to national and international health. He also recognized her recent work on the draft of the Surgeon General's Call to Action in Global Health, one of whose overarching themes is health diplomacy.